



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,477	10/22/2003	Wayne T. Mansell	1-24390	5033

4859 7590 01/13/2005

MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

EXAMINER

TRAN, DALENA

ART UNIT PAPER NUMBER

3661

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

6



UNITED STATES DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

10/691477

EXAMINER

ART UNIT	PAPER
----------	-------

20050107

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Office Action Summary

Application No.

10/691,477

Applicant(s)

MANSELL ET AL.

Examiner

Dalena Tran

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/2/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-37 are pending.
2. The prior art submitted on 1/2/04 has been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2,6,11-12,14-17,21-25,27,29, and 31, are rejected under 35 U.S.C.102(b) as being anticipated by Stallard et al. (5,555,949).

As per claim 1, Stallard et al. disclose an electronic control system for a personal mobility vehicle, the system comprising: at least one input (see at least the abstract), and at least one output, the input being adapted to be programmably mapped to the output according to a user's preference (see at least columns 2-3, lines 65-26).

As per claim 2, Stallard et al. disclose a programmable processor for controlling the output in accordance with a signal from the input, and wherein the input is a switched input on a hand control module of a personal mobility vehicle (see at least column 2, lines 52-64).

As per claim 6, Stallard et al. disclose a plurality of switched inputs including at least one input and a plurality of outputs including at least one output, wherein different switched inputs are adapted to be programmably assigned to control different outputs (see at least columns 1-2, lines 53-14).

As per claim 11, Stallard et al. disclose a processor (see at least column 2, lines 44-50), another output that is infrequently used, the processor being for controlling the infrequently used output in response to a signal from the switched input (see at least column 5, lines 14-32), and a hand control module, the at least one input being a switched input on the hand control module (see at least column 2, lines 52-64), the hand control module comprising a visual graphic, and an analog input for navigating through the visual graphic to control the at least one output, the processor being programmable to map the switched input to control the at least one output instead of the infrequently used output (see at least column 6, lines 7-55).

As per claim 12, Stallard et al. disclose a programmable processor and a memory with software embedded in the memory, the software being adapted to be configured so that the processor can map the input to control the output (see at least columns 4-5, lines 34-13; and columns 5-6, lines 33-6).

As per claim 14, Stallard et al. disclose an electronic control system for a personal mobility vehicle, the system comprising: at least one user interface object (see at least the abstract), a plurality of targets (see at least columns 3-4, lines 26-17; and column 5, lines 14-32), and a processor that is programmable to send an action message from the input to a desired one of the targets (see at least columns 2-3, lines 65-26).

As per claim 15, Stallard et al. disclose the user interface object is a switched input, the processor being programmable to cause the switched input to act as either a latched input or an unlatched input (see at least columns 4-5, lines 57-13).

As per claim 16, Stallard et al. disclose a personal mobility vehicle comprising a control system and at least one input (see at least the abstract), and an output, the input being

Art Unit: 3661

programmable mapped to the output so that commonly used outputs can be performed while minimizing the number of sequences of input commands required to perform the output (see at least columns 4-5, lines 35-13).

As per claim 17, Stallard et al. disclose the output is a control module (see at least columns 2-3, lines 65-26).

As per claims 21-22, Stallard et al. disclose a method for mapping personal mobility vehicle inputs to outputs, the method comprising: providing a personal mobility vehicle having inputs, outputs, and a programmable processor for performing operations or control functions of the outputs in response to signals from the inputs (see at least the abstract), selecting a desired input (see at least columns 4-5, lines 34-13), assigning an operation or control function to the desired input, and associating an output with the assigned operation or control function (see at least columns 5-6, lines 33-6).

As per claim 23, Stallard et al. disclose entering a programming mode (see at least column 6, lines 7-54), and depressing the desired input (see at least columns 5-6, lines 33-6).

As per claims 24, and 31, Stallard et al. disclose providing a program editor, wherein the program editor is a software application, and the software application is integral with the personal mobility vehicle (see at least columns 4-5, lines 34-13).

As per claim 25, Stallard et al. disclose providing a list of inputs, and selecting an input from the list (see at least columns 4-5, lines 57-13).

As per claims 27, and 29, Stallard et al. disclose the assigning and the associating step comprises providing a list of operations, outputs, or control functions, and selecting an operation, output, or control function from the list (see at least columns 3-4, lines 27-17).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-5,7-10,13,18-20,26,28,30, and 32-37, are rejected under 35 U.S.C.103(a) as being unpatentable over Stallard et al. (5,555,949) in view of Coleman (6,154,690).

As per claims 3, and 7, Stallard et al. do not disclose the output is a power seat module. However, Coleman discloses the output is a power seat module (see at least column 4, lines 37-47; and columns 6-7, lines 47-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Stallard et al. by combining the output is a power seat module for adjusting the seat depending on the user's preference for a vehicle.

As per claim 4, Stallard et al. do not disclose the output is an environmental control module. However, Coleman discloses the output is an environmental control module (see at least columns 5-6, lines 55-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Stallard et al. by combining the output is an environmental control module to assist the user control any device around the user which minimizes human assistance and maximizes user independence.

As per claim 5, Stallard et al. disclose the output is a motor control module and the processor controls a parameter of the motor control module in accordance with the signal from the switched input (see at least columns 2-3, lines 65-26).

As per claims 8-10, Stallard et al. do not disclose an accessory function. However, Coleman discloses the at least one output controls an accessory function, the at least one input is a switched input for controlling a vehicle light, and the at least one input is a switched input for controlling another output that is infrequently used, the switched input being adapted to be programmably mapped to control the at least one output instead of the light, and infrequently used output (see at least columns 5-6, lines 55-3; and column 7, lines 11-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Stallard et al. by combining the at least one output controls an accessory function to provide maximum variety control functions around the user.

Also, as per claim 13, Coleman discloses a software profile is created for a particular user (see at least column 4, lines 5-17; and column 6, lines 4-27).

As per claims 18-20, 32, and 33-35, Stallard et al. do not disclose an external device to the vehicle. However, Coleman discloses a connector for attaching an external device to the vehicle, the inputs being mapped to the outputs with the external device, the external device is a personal computer, and the external device is a handheld device including an application capable of mapping the inputs to the outputs, a software application is stored in an external device that is adapted to be removably connected to the mobility vehicle (see at least columns 5-6, lines 55-3; and columns 6-7, lines 47-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Stallard et al. by combining an external device to the vehicle for controlling input entering by the user and user data.

As per claims 26,28, and 30, Coleman discloses the selecting, and associating step comprises providing a field and entering an input and an output into the field, and the assigning

Art Unit: 3661

step comprises entering an operation or control function into the field (see at least column 4, lines 17-36).

As per claims 36-37, Coleman discloses the operations or control functions include action messages and parameter values, and the outputs include one or more control modules (see at least column 6, lines 4-27; and column 9, lines 4-58).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- . Trkla (4,949,408)
- . Kamen (5,794,730)
- . Rossi et al. (6,222,282)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

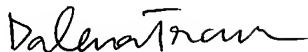
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Dalena Tran

A handwritten signature in cursive script that reads "Dalena Tran".

January 7, 2005